

*Purshii* and *E. peregrina* the difficulties surrounding this group have been removed. It is believed that they are in part ameliorated, but while *E. peregrina* and *E. Purshii* appear to be very definite species units, each quite constant in its characters, the same cannot so certainly be said of *E. pilosa*. In fact the amount of variation seen in the material grouped together under *E. pilosa* is so much more pronounced than in the two allied species that it is strongly suspected this is by no means a homogeneous series. *E. Purshii* has proved to be so satisfactorily separable, despite critical opinion to the contrary, that one is naturally inclined to a belief that this is a group still deserving careful study.

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## A NEW POLYGONUM FROM SOUTHEASTERN MASSACHUSETTS.

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IN 1913, while exploring the ponds of Plymouth, Massachusetts, with Messrs. Francis W. Hunnewell and Bayard Long, the writer was much interested in a strictly indigenous annual *Polygonum* of the sandy pond-margins which was obviously related to the naturalized *P. Persicaria* L. but which had more slender and more richly colored spikes. Although it was obvious that this indigenous plant of southeastern Massachusetts could not be exactly matched by *P. Persicaria*, no serious attempt was made to differentiate the two until further observations could be made. It is noteworthy, however, that in 1915, Mr. C. A. Weatherby, collecting the plant of "sandy strand of a pond" on Cape Cod, should have labeled his material "*Polygonum Persicaria* L.?" In 1918 the real opportunity to watch the plant came when the writer spent the summer on Cape Cod with side-trips into Plymouth. In this exploration he was accompanied most of the time by Mr. Long and the native *Polygonum* was found to be universally distributed on the Cape, and everywhere a plant strictly of pond-margins. The ubiquitous weed, *P. Persicaria*, with its duller pink spikes, was naturally abundant near houses and about the farms, and the indigenous plant held its own peculiar differences



with constancy. Detailed study in the herbarium brings out other points which will be discussed below and which justify the description of the indigenous plant as

**POLYGONUM puritanorum**, n. sp., annuum; caule gracile decumbente adscendente vel erecto 1–6 dm. longo deinde ramosissimo ramis glabris vel plus minusve strigosis; ochreis laxe cylindricis strigosis ciliatis; foliis rhomboideo-lanceolatis utrinque acuminatis acutis vel subacutis breviter petiolatis vel subsessilibus plerumque immaculatis subtus plus minusve strigosis primariis 3–10 cm. longis 0.7–1.6 cm. latis; pedunculis erectis glabris vel strigosis longioribus 1–5 cm. longis; spicis densissimis cylindricis primariis 1–3.5 cm. longis 4–6.5 mm. crassis; ochreolis brunnescentibus ciliatis; perianthiis roseis vel purpureis 1.8–2 deinde 2.4–2.6 mm. longis maturitate laevibus vel obsolete nervosis; pedicellis inclusis vel paullo exsertis; staminibus 5–6; achaeniis ovato-orbicularibus biconvexis vel trigonis atris lucidis 2 mm. longis 1.4 mm. latis plerumque inclusis.

Annual: stem slender, decumbent, ascending or erect, 1–6 dm. long, finally much branched; branches glabrous or more or less strigose: ochreae loosely cylindric, strigose, ciliate: leaves rhombic-lanceolate, acuminate at base and apex, acute or subacute, short-petioled or subsessile, usually unspotted, more or less strigose beneath; the primary ones 3–10 cm. long, 0.7–1.6 cm. broad: peduncles erect, glabrous or strigose; the longer 1–5 cm. long: spikes very dense, cylindric; the primary 1–3.5 cm. long, 4–6.5 mm. thick: ochreolae brownish, ciliate: perianths rose-pink or purple, 1.8–2, becoming 2.4–2.6 mm. long, in maturity smooth or only obsoletely nerved: pedicels included or a little exserted: stamens 5 or 6: achenes ovate-orbicular, biconvex or trigonous, black, lustrous, 2 mm. long, 1.4 mm. broad, mostly included.—Plymouth and Barnstable Cos., MASSACHUSETTS: sandy shore of Clear Pond, Plymouth, August 30, 1913, *Fernald, Hunnewell & Long*, no. 9,402; damp sandy beach of Boot Pond, Plymouth, September 6, 1913, *Fernald, Hunnewell & Long*, no. 9,400; damp sandy beach of Great South Pond, Plymouth, September 6, 1913, *Fernald, Hunnewell & Long*, no. 9,401; gravelly and sandy beach, Little Sandy Pond, Plymouth, August 7 & 8, 1918, *Fernald & Clark*, no. 16,755; wet sandy or gravelly lower beach, Half-way Pond, Barnstable, September 4, 1918, *Fernald & Long*, no. 16,759; Yarmouth, September 10, 1907, *E. W. Sinnott*; Scargo Pond, Dennis, August 22, 1907, *E. W. Sinnott*; sandy strand of a pond, Dennis, October 1, 1915, *C. A. Weatherby*; sandy beach, Buck Pond, Harwich, July 8, 1918, *Fernald*, no. 16,752; sandy and gravelly beach, Hawk's Nest Pond, Harwich, July 28, 1918, *Fernald*, no. 16,754; bare sandy beach, east end of Long Pond, Harwich, August 14, 1918, *Fernald & Long*, no. 16,756 (TYPE in Gray Herb.); sandy beach, Seymour Pond, Harwich, September 19, 1918, *Fernald & Weatherby*, no. 16,762;



wet sandy shore of Sheep Pond, Brewster, July 4, 1911, *F. S. Collins*, no. 1,184, July 11, 1918, *Fernald*, no. 16,753; sandy beach of Cliff Pond, Brewster, August 27, 1918, *Fernald & Long*, no. 16,757; wet sandy beach of Long Pond (east of Cliff Pond), Brewster, August 27, 1918, *Fernald & Long*, no. 16,758; wet sandy lower beach of second pond north of No Bottom Pond, Brewster, September 7, 1918, *Fernald & Long*, no. 16,760; lower damp sandy beach of Griffith's Pond, Brewster, September 12, 1918, *Fernald*, no. 16,761; sandy shore of pond, Eastham, August 8, 1907, *F. S. Collins*, no. 425.

Related on the one hand to *P. Persicaria* L., on the other to *P. minus* Hudson. *P. Persicaria* has thicker spikes, the mature primary ones 7-11 mm. thick; larger flowers and achenes, the achenes 2.5-3 mm. long, and often slightly exserted at maturity; and in the mature perianth the lower half of the segments is usually reticulated or strongly nerved. Besides these more constant characters there are others less pronounced: when well developed *P. Persicaria* is a much coarser plant and the primary leaves may become 2-4 cm. wide; in *P. Persicaria*, also, the pedicels are inclined to be more exserted, though this character is not a reliable one.

*P. puritanorum* in its smooth small perianth and small achene is nearer to *P. minus* than to *P. Persicaria*. *P. minus*, however, has decidedly less rhombic-lanceolate leaves, its primary leaves being lanceolate or linear-lanceolate to narrowly oblong; the spikes of *P. minus* are extremely slender and loosely flowered, much as in *P. Hydropiper*; and the achenes are ovate rather than ovate-orbicular.

GRAY HERBARIUM.